

USPTO AG 642-HCL  
101769-62  
3163-St-eti

AMENDMENTS TO THE CLAIMS
--------------------------

## Claim 1 (currently amended)

1. Hot-melt pressure-sensitive adhesive based one or more non-thermoplastic elastomers, comprising

at least 100 parts by mass of ~~one or more non-thermoplastic elastomers~~, a natural rubber;

from 1 to 100 parts by mass of one or more tackifying resins selected from the group consisting of a hydrogenated rosin and an aromatic-modified hydrocarbon resin;

from 1 to 100 parts by mass of one or more reactive phenolic resins, for the chemical/thermal crosslinking of the hot-melt pressure-sensitive adhesive, ~~whose methylol content is from 1 to 20% by weight based on the reactive phenolic resin wherein~~ the one or more reactive phenolic resins are selected from the group consisting of an octylphenol-formaldehyde resin having a methylol content of from 6 to 9% by weight and an octylphenol-formaldehyde resin having a methylol content of from 9 to 13% by weight and a bromine content of 6 to 9% by weight;

optionally from 1 to 100 parts by mass of crosslinking accelerator substances.

## Claim 2 (cancelled)

## Claim 3 (currently amended)

3. Hot-melt pressure-sensitive adhesive according to Claim 1, based on a polymer blend of ~~one or more of the non-thermoplastic elastomers~~ a natural rubber and one or more thermoplastic elastomers selected from the group consisting of polypropylenes, polyethylenes, metallocene-catalysed polyolefins, polyesters, polystyrenes and synthetic block copolymer rubbers.

tesa AG 642-HCL  
101769-62  
3163-St-ati

Claim 4 (previously added)

4. Hot-melt pressure-sensitive adhesive according to Claim 1, wherein the crosslinking accelerator substances are selected from the group consisting of chloroprenes, metal oxides, organic acids or salts thereof, metal stearates and metal resinates.

Claim 5 (previously added)

5. Hot-melt pressure-sensitive adhesive according to Claim 1, wherein the reactive phenolic resins are halogenated and have a halogen content of from 1 to 20% by weight, based on the reactive phenolic resin.

Claim 6 (previously added)

6. Hot-melt pressure-sensitive adhesive according to Claim 1, wherein the reactive phenolic resin comprises a mixture of different reactive phenolic resins having different reactivities.

Claim 7 (previously added)

7. Hot-melt pressure-sensitive adhesive according to Claim 1, wherein fillers are added to the adhesive which are selected from the group consisting of metal oxides, chalks, precipitated or pyrogenic silicas, solid or hollow glass beads, microballoons, carbon blacks, glass fibres, polymer fibres and combinations thereof.

Claim 8 (previously added)

8. Hot-melt pressure-sensitive adhesive according to Claim 1, wherein plasticizers are added to the adhesive which are selected from the group consisting of paraffinic or naphthenic oils, oligomeric nitrile rubbers, liquid isoprene rubbers, oligobutadienes, soft resins, wool fats, rapeseed oils, castor oils and combinations thereof.

Claim 9 (previously added)

9. Self-adhesive article comprising the hot-melt pressure-sensitive adhesive of Claim 1 applied to at least one side of a web-form material.

Claim 10 (previously added)

10. Self-adhesive article according to Claim 9, wherein the thickness of the hot-melt pressure-sensitive adhesive on the web-form material is between 5  $\mu\text{m}$  and 3000  $\mu\text{m}$ .

tesa AG 642-HCL  
101769-62  
3163-St-Stf

Claim 11 (previously added)

11. Self-adhesive article according to Claim 10, wherein the hot-melt sensitive adhesive is applied in a thickness of from 40  $\mu\text{m}$  to 1500  $\mu\text{m}$  to a release paper having an anti-adhesive coating on both sides.

Claim 12 (previously added)

12. Process for producing self-adhesive articles wherein the hot-melt pressure-sensitive adhesive of Claim 1 is applied to a web form material with the aid of a multi-roll applicator unit which comprises from two to five rolls.

Claim 13 (currently amended)

13. The hot-melt pressure-sensitive adhesive of claim 1, wherein:
- (a) the adhesive further optionally contains a thermoplastic elastomer which is chlorinated copolymer of isobutylene and isoprene;
  - (b) the optional crosslinking accelerator substances are selected from the group consisting of polychloroprene rubber and brominated butyl rubber; and
  - (c) optionally, further comprises of one or more ingredients selected from the group consisting of a filler, a plasticizer and an aging inhibitor.
  - ~~(a) the one or more non-thermoplastic elastomers is a natural rubber;~~
  - ~~(b) optionally contains a chlorinated copolymer of isobutylene and isoprene as a thermoplastic elastomer;~~
  - ~~(c) the one or more tackifying resins are selected from the group consisting of a hydrogenated resin and an aromatic modified hydrocarbon resin;~~
  - ~~(d) the one or more reactive phenolic resins are selected from the group consisting of an octylphenol-formaldehyde resin having a methylol content of from 5 to 9% by weight and an octylphenol-formaldehyde resin having a methylol content of from 8 to 13% by weight and a bromine content of 5 to 9% by weight;~~
  - ~~(e) the optional crosslinking accelerator substances are selected from the group consisting of polychloroprene rubber and brominated butyl rubber; and optionally, further comprises of one or more ingredients selected from the group consisting of a filler, a plasticizer and an aging inhibitor.~~

tesa AG 642-HCL  
101769-62  
3163-St-sti

Claim 14 (cancelled)

Claim 15 (previously added)

15. The hot-melt pressure-sensitive adhesive of claim 44 13, wherein the filler is a zinc oxide, the plasticizer is a paraffinic white oil and the aging inhibitor is 2,2-methylenebis[6-(1,1-dimethylethyl)-4-methylphenol]].

Claim 16 (previously added)

16. The hot-melt pressure-sensitive adhesive of claim 1 wherein in the uncrosslinked state has a complex viscosity of from 10,000 to 300,000 Pa·s at 0.1 rad/s and 110°C.

Claim 17 (previously added)

17. The hot-melt pressure-sensitive adhesive of claim 16 wherein in the uncrosslinked state has a complex viscosity of from 30,000 to 170,000 Pa·s at 0.1 rad/s and 110°C.

Claim 18 (previously added)

18. The hot-melt pressure-sensitive adhesive of claim 1 wherein in the uncrosslinked state has a complex viscosity of from 40,000 to 140,000 Pa·s at 0.1 rad/s and 110°C.